

**ABSTRACT**

The invention relates to a method and an apparatus implementing the method for improving the performance of a radio system using interleaving. In the method of the invention the interleaving depth and the type of interleaving method are selected specifically for each symbol block, the interleaving depth and the interleaving method type of the symbol blocks are signalled to a receiver in order to remove the interleaving, and the interleaving of the symbol blocks is removed using de-interleaving in the receiver. The method of the invention allows to combine rectangular interleaving and diagonal interleaving more efficiently without some blocks remaining partly empty and simultaneously to restrict the delay created in interleaving. The interleaving depth can also be selected block-specifically.

(Figure 8f)